geon, in the first place, ascertains that the respiratory organs and the circulating system are sound, if a sufficient quantity of air is admitted into the lungs, together with the chloroform; and, finally, if the inhalation is suspended immediately upon the production of unconsciousness.

M. Amussat maintained that although a free ingress of air took place into the lungs at the same time with chloroform vapours, the colour of the arterial blood became darker as soon as the insensibility was produced. M. A. observes that the effects of ether or chloroform were to be particularly dreaded when patients had lost much blood.—*Med. Times*, Nov. 25.

These conclusions of M. Malgaigne have been attacked by M. Guerin, who proposed to substitute for them the following:—

1. That chloroform, a most energetic agent, was susceptible, in experienced hands, of rendering signal service, but exhibited in expressive doses, or for too long a time, or by improper methods, it might become a direct cause of death.

2. That circumstances, peculiar conditions existed, not yet altogether pointed out with precision, but of which certain instances demonstrated peremptorily the possibility, which increased the toxic properties of chloroform, and which necessitated the greatest caution in its use.

3. That in M. Gorre's case, it was the opinion of the Academy that chloroform had probably occasioned death, although that agent had been employed in a dose and in a manner which experiment had almost universally shown to be innocuous; and that the rapidity, and exceptional intensity of the intoxication, had been in that instance favoured by individual circumstances, which the surgeon could not possibly foresee.—*Med. Times*, Dec. 2, 1848.

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13. *Administration of Mercury in small Doses.*—Mr. Hancock stated to the Medical Society of London that he had adopted the plan recommended by some French surgeons of giving calomel in very small doses,—a twentieth part of a grain every hour day and night, until the specific effect of the medicine was produced,—with two patients in Charing-cross Hospital, both of whom had been admitted with inflammation of the testicle, consequent upon gonorrhœa. In one case, he gave a twentieth of a grain of calomel every hour; in the other, a twentieth of a grain every three hours. In the first case, the patient was salivated in thirty-six hours; in the second case, in forty-eight hours. The advantage of this mode of producing ptyalism was, that the effect was milder and more controllable than where larger doses were administered; the bowels were also unaffected. The mode of its administration was as follows:—Calomel, one grain; confection of opium, a scruple; divide in twenty pills—one every hour. In the cases related, the effects of this medicine were most decided.—*Lancet*, Oct. 7, 1848.

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14. *Narcotic Principle in Indian Hemp, a Peculiar Resin.* By Messrs. T. & H. Smith, Edinburgh.—The researches of these chemists show that the remarkable action of Indian hemp on the animal economy depends on the presence of a particular resin, which is soluble in alcohol, and from which it is precipitated by water in the form of a white powdery substance.

This resin, obtained by means of a process described by the authors, is of a yellowish-brown colour. It has a hot, pungent, balsamic taste. Heated on a plate of platinum, it melts and burns away without leaving any residuum, diffusing a strong aromatic odour.

Messrs. Smith found, by experiments made on themselves, that this substance possesses the soothing and hypnotic properties of morphia. In the dose of two-thirds of one grain English, it is a powerful narcotic; in the dose of one grain, it produces complete intoxication.

Under its influence the pupil is contracted. Its action is very persistent; but it does not appear, like opium, to have the inconvenience of producing constipation.

To this resin, of which the plant contains from six to seven per cent., the various preparations used in the East, as haschisch, &c., owe their well-known properties.—*Edin. Med. and Surg. Journ.*, Oct. 1848, from *Pharmaceutical Journal.*

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15. *Camphor and Chloroform Mixture.* By T. and H. Smith. (*Monthly Journ. & Retrosp. of the Medical Sciences*, Nov. 1848.)—There is great difficulty, or rather

an utter impossibility of administering camphor in a state of solution in doses of sufficient potency in some cases. The form of pill, the only mode of giving large doses of this medicine, is objectionable in many cases, and in others altogether inadmissible. The camphor, being merely in a state of mechanical division, on being set free in the stomach, from its extreme lightness quickly separates and floats about, thus producing in many cases much local irritation in that organ, instead of soothing or arousing the general system.

Messrs. T. & H. Smith, Chemists of Edinburgh, give a formula for exhibiting camphor in doses of almost any amount of strength—certainly as large as any case can require—and that in a state of perfect solution: thereby allowing of a nice adaptation of the dose to the circumstances of each case.

The formula is as follows:—Three drachms of solid camphor are dissolved in one fluid drachm of chloroform. This is, perhaps, one of the most remarkable cases of solution the whole range of chemistry presents to us. The solution is most *rapid and complete,* and the bulk of the liquid is now increased from one to fully four fluid drachms. This solution rubbed up with the *yelk* of one fresh egg, may be formed into an extremely elegant emulsion by the addition of water, without the slightest separation of the camphor or chloroform; in fact, no separation of any kind takes place. If to the proportions given above as much water be added as to make a four-ounce mixture, each teaspoonful of the mixture when formed will contain about five and a half grains of camphor, and about two minims of chloroform. The capability of the formula being varied, so that either the camphor or chloroform may constitute the predominating ingredient, must be quite obvious. This mixture can be administered in any ordinary vehicle, such as water, without the occurrence of any separation; indeed, the mixture is as readily and completely effected as cream with tea or coffee. We have tried the effect of several medicinal substances on the mixture. With none of them has any separation been caused.

A weak saline solution, composed of common salt, phosphate of soda, and an alkaline carbonate, mixed readily, as well as a solution of muriate of morphia and sulphate of zinc. With the volatile alkali and acid liquids—such as a weak solution of acetic and muriatic acids—the mixture seems to become more intimate and stable. The mixture with ammonia has stood since its preparation—now fully a week—without any separation. With water alone, however, the chloroform solution of camphor separates in a few days, but they readily unite again when slightly agitated. The solution of camphor in chloroform, although insoluble in water alone, appears in this mixture to be in as complete a state of mixture as the butter in milk when newly drawn from the cow.

The therapeutic value of the formula remains to be ascertained.

16. *Supposed Test for Cod Liver Oil.* By Mr. Hockin.—Mixing together on a porcelain slab four parts of genuine cod-liver oil, and one part of strong sulphuric acid, and stirring with a glass rod, a beautiful and rich violet colour, similar to that of the fumes of iodine, is produced, which in a few instances passes gradually into a dirty brown; the altered portion of the oil separating in regularly shaped patches from that out of reach of the acid. This characteristic is not possessed by either olive, almond, seal, whale, or fine sperm oil; nor, Mr. Hockin believes, by any other fat oil. The reaction varies in appearance from a delicate fawn to a dark caramel.—*Med. Times, Sept.* 23.

[We have tried this test and found the results to correspond with the statement of Mr. H. But it is stated in the *Pharmaceutical Journal,* that this test will merely indicate the presence of cod-liver oil; but does not afford the means of ascertaining whether other oils be mixed with it or not, and that with mixed oils in various proportions the result is so equivocal as to be calculated to mislead except in the extreme case of no cod-liver oil being present. It also gives no indication of the quality of the oil, as some of the worst samples, not fit for sale, exhibited the purple appearance as decidedly as the best genuine oil.]